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## WHAT IS CLAIMED IS:

- A method for treating a host comprising implanting cells of an immortalized human neuro-derived fetal
  cell line into the host.
  - 2. A method as in claim 1, wherein the fetal cell line is derived from human fetal astrocytes.
- 3. A method as in claim 2, wherein the cells are derived from the SVG cell line.
  - 4. A method as in claim 1, wherein the cells are encapsulated by a membrane which is impermeable to antibodies.
  - 5. A method as in claim 1, wherein the cells are implanted into the central nervous system of the host.
- 6. A method as in claim 5, wherein the cells are implanted into the basal ganglia of the host.
  - 7. A method as in claim 5, wherein the cells are implanted into the lumbar theca of the host.
- 8. A method as in claim 5, wherein the cells are implanted into a lateral ventricle of the host.
  - 9. A method as in claim 1, wherein the cells are implanted extraneurally.
  - 10. A method as in claim 9, wherein the cells are implanted subcutaneously.
- 11. A method as in claim 1, wherein the cells have 35 been transfected with a vector comprising a nucleic acid sequence encoding a peptide for expression by the cells.

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- 12. A method as in claim 11, wherein the peptide is an enzyme.
- 5 13. A method as in claim 11, wherein the peptide is a disease associated antigen.
  - 14. A method as in claim 13, further comprising removing the cells following implantation.

15. A method as in claim 13, wherein the cells are encapsulated by a membrane impermeable to antibodies.

- 16. A method for treating Parkinson's Disease in a host comprising implanting cells derived from an SVG cell line into the basal ganglia of the host.
- 17. A method as in claim 16, wherein the SVG cells are transfected with a nucleic acid sequence encoding tyrosine 20 hydroxylase operably linked to a transcriptional promoter and a transcriptional terminator.
- 18. A method as in claim 16, wherein the host does not require immunosuppressive therapy following implantation of the cells.
  - 19. A method of treating a neurological disorder caused by a lesion in a host's central nervous system, comprising:
- placing a needle into the central nervous system; and

injecting a suspension of cells into the central nervous system through the needle, which cells are from an immortalized human neuro-derived fetal cell line.

20. A method as in claim 19, wherein the lesion is confined to a region of the central nervous system and the cells are injected into the region.

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- 21. A method as in claim 19, wherein the cells are SVG cells.
- 22. A method as in claim 19, wherein the neurological disorder is Parkinsonism.
  - 23. A method as in claim 19, wherein the cells are injected with a infusion pump.